

## United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
· 10/517,661	12/29/2005	Igor Konyashin	703430	5617	
30008 GUDRUN E. F	7590 05/24/200' HUCKETT DRAUDT	1	EXAMINER		
LONSSTR. 59	LONSSTR. 59			ZHU, WEIPING	
WUPPERTAL, 42289 GERMANY		•	ART UNIT	PAPER NUMBER	
			1742		
				4	
•			MAIL DATE	DELIVERY MODE	
			05/24/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)					
	10/517,661	KONYASHIN ET AL.					
Office Action Summary	Examiner	Art Unit					
	Weiping Zhu	1742					
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	correspondence address					
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period value for reply within the set or extended period for reply will, by statute any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tin will apply and will expire SIX (6) MONTHS from , cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).					
Status		•					
1) Responsive to communication(s) filed on 01 M	<u>ay 2007</u> .						
2a) ☐ This action is <b>FINAL</b> . 2b) ☑ This	<u> </u>						
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is							
closed in accordance with the practice under E	Ex parte Quayle, 1935 C.D. 11, 4	53 O.G. 213.					
Disposition of Claims							
4) Claim(s) 30-88 is/are pending in the application	n.						
4a) Of the above claim(s) is/are withdrawn from consideration.							
5) Claim(s) is/are allowed.							
6) Claim(s) is/are rejected.	6) Claim(s) is/are rejected.						
7) Claim(s) is/are objected to.							
8) Claim(s) <u>30-88</u> are subject to restriction and/or	election requirement.						
Application Papers							
9) The specification is objected to by the Examine	er.						
10) The drawing(s) filed on is/are: a) acc		Examiner.					
Applicant may not request that any objection to the	drawing(s) be held in abeyance. Se	e 37 CFR 1.85(a).					
Replacement drawing sheet(s) including the correct	tion is required if the drawing(s) is ob	jected to. See 37 CFR 1.121(d).					
11) The oath or declaration is objected to by the Ex	caminer. Note the attached Office	Action or form PTO-152.					
Priority under 35 U.S.C. § 119							
12)⊠ Acknowledgment is made of a claim for foreign	priority under 35 U.S.C. § 119(a	)-(d) or (f).					
a) ☑ All b) ☐ Some * c) ☐ None of:	s have been received						
<ul> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> </ul>							
3. Copies of the certified copies of the prior	• •						
application from the International Bureau	•						
* See the attached detailed Office action for a list	of the certified copies not receive	ed.					
Attachment(s)  1) Notice of References Cited (PTO-892)	4) Interview Summary	(PTO-413)					
2) DNotice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail D	ate					
3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	5) Notice of Informal F 6) Other:	Patent Application					
- Spot Hotophilan Batto	5/ <u></u> .						

Application/Control Number: 10/517,661

Art Unit: 1742

## **DETAILED ACTION**

## Election/Restrictions

1. Restriction is required under 35 U.S.C. 121 and 372.

The application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.4999, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted

- Claims 30-51 and 86, drawn to WC hard metals having coercive field intensity of up to 17.0 kA/m.
- II. Claims 52-70 and 87, drawn to WC hard metals having coercive field intensity of 17 kA/m 30 kA/m.
- Claims 71-85 and 88, drawn to WC hard metals requiring at least 5 vol.% nanoparticles of ordered phases of W, Co and/or C in the binder.

The inventions listed as I-III do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: the special technical feature in Group I is that the WC hard metals have a coercive field intensity of up to 17.0 kA/m (i.e. coarse-grained hard metals), which is not present in Groups II and III. The special technical feature in Group II is that the WC hard metals have a coercive field intensity of 17 kA/m – 30 kA/m (i.e. medium-grained hard metals), which is not present in Groups I and III. The special technical feature in Group III is that the WC hard metals require at least 5 vol.% nanoparticles of ordered phases of W, Co and/or C in the

Art Unit: 1742

binder, which is not present in Groups I and II. Inventions I-III lack the same or corresponding special technical features. Therefore unity of invention is lacking and restriction is appropriate.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

The election of an invention may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Should the applicant traverse on the ground that the inventions are not patentably distinct, the applicant should submit evidence or identify such evidence now of record showing the inventions to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C.103 (a) of the other invention.

The applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Application/Control Number: 10/517,661

Art Unit: 1742

Page 4

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Weiping Zhu whose telephone number is 571-272-6725. The examiner can normally be reached on 8:30-16:30 Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on 571-272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

WZ

4/27/2006

ROY KING SUPERVISORY PATENT EXAMINER
TECH LELDEN GENTER 1700